

(1994). Fish contamination in Richmond harbor channel, California Department of Health Services, Environmental Health Investigations Branch.

California Department of Health Services (CDHS) has been investigating fishing activities near the United Heckathorn site in Richmond as part of its mandate to conduct public health assessments at federal Superfund sites. United Heckathorn is a former chemical processing facility that has contaminated soil at the site and sediments in the adjacent Lauritzen Canal. Although the area around the United Heckathorn site has been posted with signs warning that fish may be contaminated, CDHS was concerned about a popular fishing location at the end of South 8th Street on the Harbor Channel, located about 1/3 a mile from the site (see maps in attachment A). CDHS collected two of the most frequently caught fish species from the South 8th Street site in September 1993. Results of the fish testing showed elevated levels of the pesticides DDT and dieldrin which are chemicals of concern at the United Heckathorn site. The results also showed elevated levels of polychlorinated biphenyls (PCBs), the source of which is unknown.

We have estimated theoretical cancer and non-cancer health risks from consuming the fish from South 8th Street. These risks are clearly of regulatory concern. Our estimate of theoretical lifetime cancer risks are above one in ten thousand at a low fish consumption rate (one meal of fish or about 7 ounces per month). PCBs contribute 3/4 of the total cancer risk although there are considerable uncertainties in PCB risk estimates. We also estimate potential adverse non-cancer health effects at low to moderate consumption rates (one meal per month to one meal per week). Again, the non-cancer health effects, which include immunological effects, are driven primarily by the PCBs. There is also limited evidence that PCBs may cause developmental problems in humans.

In interviews of 27 persons fishing at the South 8th Street location, CDHS found predominantly African-Americans and Laotians who live in nearby neighborhoods. All persons said they consume what they catch or give the fish to others to eat. Many have fished at this location for greater than 10 years. Few, if any, were aware of possible contamination of fish.

Although the levels of these chemicals in fish are of concern, it is unlikely that any health effects would be detectable, even by systematic study, in the small population who fish at this location. Nonetheless, based on these results we recommend that those health agencies mandated to protect public health—CDHS, the California Environmental Protection Agency's (Cal EPA) Office of Environmental Health Hazard Assessment (OEHHA), and the Contra Costa County Health Department Services (CCCHDS)—issue a health advisory for consumption of fish caught at South 8th Street in Richmond. A draft interim health advisory has been developed by OEHHA (see attachment B). CDHS, OEHHA, and CCCHDS have also written a fact sheet which summarizes the findings (see attachment C). CDHS recommends that we, together with OEHHA and CCCHDS, present these findings to the Public as soon as possible. In addition, CDHS will continue to collaborate with regulatory agencies conducting additional monitoring of fish contamination in the San Francisco Bay.